



1183416

## STATE OF COLORADO

For Agency Use Only

Permit Number Assigned

Date Received 8/6/10  
Month Day Year

Dedicated to protecting and improving the health and environment of the people of Colorado

4300 Cherry Creek Dr. S.  
Denver, Colorado 80246-1530  
Phone (303) 692-2000  
TDD Line (303) 691-7700  
Located in Glendale, ColoradoLaboratory Services Division  
8100 Lowry Blvd.  
Denver, Colorado 80230-6928  
(303) 692-3090<http://www.cdphe.state.co.us>Colorado Department  
of Public Health  
and Environment

## COLORADO DISCHARGE PERMIT SYSTEM (CDPS)

## INDUSTRIAL INDIVIDUAL WASTEWATER DISCHARGE PERMIT

Please print or type. Original signatures are required. All items must be completed accurately and in their entirety for the application to be deemed complete. Incomplete applications will not be processed until all information is received which will ultimately delay the issuance of a permit. If more space is required to answer any question, please attach additional sheets to the application form. Applications must be submitted by certified mail or hand delivered to:

Colorado Department of Public Health and Environment  
Water Quality Control Division

4300 Cherry Creek Drive South WQCD-P-B2  
Denver, Colorado 80246-1530

**PHOTO COPIES, FAXED COPIES, PDF COPIES OR EMAILED COPIES WILL NOT BE ACCEPTED.**

This application is for use by all **individual industrial process water dischargers to surface water, ground water or stormwater dischargers**. Discharges to ground water may occur from impoundments that are either non-discharging to surface water or discharging to surface water, land application and septic systems, whose design capacity is greater than 2000 gallons per day. The Division has industry specific permits for construction dewatering, sand and gravel, gasoline clean up sites or other groundwater remediation, hydrostatic testing, subterranean dewatering, water treatment plants, hardrock mining, coal mining, non-contact cooling water, aquatic animal production, produced water from oil and gas facilities, commercial washing of outdoor structures, along with several for stormwater only discharges. If the facility falls under one of these activities, please check the website for the appropriate application ([www.coloradowaterpermits.com](http://www.coloradowaterpermits.com) – click on the industrial link).

## PERMIT INFORMATION

Reason for Application: ☒ NEW PERMIT☐ RENEW PERMIT

EXISTING PERMIT # \_\_\_\_\_

Discharge is to ☐ Surface Water ☐ Ground Water ☒ BothApplicant is: ☐ Property Owner ☒ Contractor/Operator

## 1. Permit Applicant Legal Contact Address and Contact Information

Company Name Atlantic Richfield CompanyFirst Name Chuck Last Name StilwellTitle Remediation ManagerMailing Address BP Exploration Alaska, 900 E. Benson Blvd.City, State and Zip Code Anchorage, AK 99508Phone (907) 564-4608 Fax \_\_\_\_\_ Cell (406) 491-1129E-mail Address Chuck.Stilwell@bp.com

**2. Other Contact Information**Owner ☒ Same as Applicant

Company Name \_\_\_\_\_  
First Name \_\_\_\_\_ Last Name \_\_\_\_\_  
Title \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
City, State and Zip Code \_\_\_\_\_  
Phone \_\_\_\_\_ Fax \_\_\_\_\_ Cell \_\_\_\_\_  
E-mail Address \_\_\_\_\_

Operator ☒ Yes We have a Certified Operator ☐ Same as Applicant

Company Name To be determined  
First Name \_\_\_\_\_ Last Name \_\_\_\_\_  
Title \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
City, State and Zip Code \_\_\_\_\_  
Phone \_\_\_\_\_ Fax \_\_\_\_\_ Cell \_\_\_\_\_  
E-mail Address \_\_\_\_\_  
Certification Number \_\_\_\_\_ Certification Level \_\_\_\_\_

Facility Contact ☐ Same as Applicant

Company Name To be determined  
First Name \_\_\_\_\_ Last Name \_\_\_\_\_  
Title \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
City, State and Zip Code \_\_\_\_\_  
Phone \_\_\_\_\_ Fax \_\_\_\_\_ Cell \_\_\_\_\_  
E-mail Address \_\_\_\_\_

Is the Facility/Site Address and Contact the DMR Mailing Address and Contact? ☒ YES ☐ NODMR Mailing Address and Contact ☒ Same as Applicant

Company Name \_\_\_\_\_  
First Name \_\_\_\_\_ Last Name \_\_\_\_\_  
Title \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
City, State and Zip Code \_\_\_\_\_  
Phone \_\_\_\_\_ Fax \_\_\_\_\_ Cell \_\_\_\_\_  
E-mail Address \_\_\_\_\_

If more spaces are needed, please add additional pages



Billing Address and Contact ☒ Same as Applicant

Company Name \_\_\_\_\_  
 First Name \_\_\_\_\_ Last Name \_\_\_\_\_  
 Title \_\_\_\_\_  
 Mailing Address \_\_\_\_\_  
 City, State and Zip Code \_\_\_\_\_  
 Phone \_\_\_\_\_ Fax \_\_\_\_\_ Cell \_\_\_\_\_  
 E-mail Address \_\_\_\_\_

**Assignment of Authorized Agent Regulation 61 [61.4(1)]**

In accordance with Regulation 61, all reports required by permits and other information requested by the Division shall be signed by a person described in section 61.4(1)(e) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- i. The authorization is made in writing by a person described in paragraph 61.4(1)(e);
- ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a **named individual** or any individual occupying a **named position**); and,
- iii. The written authorization is submitted to the Division.

**Duly Authorized Representative information provided below?** ☐ NO ☒ YES

Authorized Agent Chuck Stilwell Email Address Chuck.Stilwell@bp.com  
 Title Remediation Manager Telephone No. (406) 491-1129

Authorized Position \_\_\_\_\_ Telephone No. \_\_\_\_\_  
 Currently held by \_\_\_\_\_ Email Address \_\_\_\_\_

**3. Permitted Facility Information**

- Facility Name Atlantic Richfield, St. Louis Tunnel

Type of Facility Ownership

- ☐ City Government ☐ Corporation ☒ Private ☐ Municipal or Water District  
☐ State Government ☐ Mixed Ownership \_\_\_\_\_

- **Facility/Site Location**

Street Address \_\_\_\_\_  
 City, State and Zip Code Rico, Colorado 81332  
 County Dolores

Legal Description

SW1/4 of the SW 1/4 of Section 24 and NW1/4 of the NW1/4, NE1/4 of the NW1/4, SW1/4 of the NW1/4, SE1/4 of the NW1/4 and NW1/4 of the SW1/4 of Section 25, T40N, R11W

Directions

.75 miles north of the northern boundary of the Town of Rico

Latitude (Dec.Deg) See Figure 3-1 Longitude (Dec.Deg.) \_\_\_\_\_

Horizontal Collection Method: ☐ GPS Unspecified ☐ Interpolation – Map Map Scale Number \_\_\_\_\_

Reference Point : ☐ Facility Entrance ☐ Facility Center/Centroid

3. **Permitted Facility Information continued**• **Facility Industry Classification Codes (Use SIC)**Primary 1031 (inactive) Secondary \_\_\_\_\_ Secondary \_\_\_\_\_ Secondary \_\_\_\_\_• **Facility Industrial/Business Activity**

Describe the primary industrial and/or business activities which take place on site. If this is a seasonal operation, list the months of operation:

This facility is an inactive underground lead, zinc and silver mine that has not been operated actively since 1983. The only "industrial" activity that will be conducted on site will be the operation of a lime treatment and settling system for the discharge of the St. Louis Tunnel. (See Attachment 14)

• **Production:** List the principal product(s) produced and maximum production rate.

NA

• **Intermittent Discharges**

A discharge is intermittent unless it occurs without interruption during the operating hours of the facility, except for maintenance, process change or similar shutdown. A discharge is seasonal if it occurs only during certain parts of the year.

Except for storm runoff, are any discharges intermittent or seasonal? ☐ YES ☒ NO

Describe the frequency, duration, and flow rate of each discharge occurrence, except for storm runoff, spillage, or leaks:

Average treated effluent flow rate to the Dolores River = 1.53 MGD. Flow rate varies seasonally - see Attachment 15, 2008 Water Quality Assessment, for more information.

- **Location Map:** A location map designating the facility property, intake points, discharge points, each of its hazardous waste treatment storage or disposal facilities, each well where fluids from the facility are injected underground, those wells, springs, other surface water bodies and drinking water wells listed in public records or otherwise known to the applicant and the receiving waters shall be submitted. The map shall extend one mile beyond the property boundaries. The map shall be from a 7½ or 15 minute USGS quad sheet, or a map of comparable scale. A north arrow shall be shown. **The map must be on paper 8.5 x 11 inches.**
- **Site sketch:** A legible sketch of the facility site shall be submitted and will include buildings, roads, ditches, ponds, streams, drains, sumps, impoundment(s), land application areas, any septic systems and monitoring well locations (indicate if in place or proposed). This sketch may be the same as the one in the surface water discharge permit, if no additional information is needed. **The sketch will be on 8.5 X 11 inch paper.**
- **Water Balance:** Attach a line drawing showing the water flow through the facility. Indicate sources of intake water, operations contributing wastewater to the effluent, and treatment units labeled to correspond to the more detailed descriptions in item 18. Construct a water balance on the line drawing by showing average flows between intakes, operations, treatment units, and outfalls. If a water balance cannot be determined, provide a pictorial description of the nature and amount of any sources of water and any collection or treatment measures.



## 3. Permitted Facility Information continued

• **Site-specific conditions:**

- a) Does this facility have bulk storage of diesel fuel, gasoline, solvents, fertilizers, or other hazardous materials on site? ☒ NO ☐ YES
- b) Is this operation located within one mile of a landfill, or any mine or mill tailings? ☐ NO ☒ YES

If **YES** for either of these, please show location of landfill, tailings, or possible groundwater contamination on the **Location Map** or in the **Site Sketch** (See above requirements). Please explain the location, extent of contamination, possible effect on the discharges from this facility.

- **Chemical treatment:** Will any flocculants (settling agents or chemical additives) be used to treat water prior to discharge? ☐ NO ☒ YES

If **YES**, list here and include the Material Safety Data Sheet (MSDS) with the application.

Chemical Name *	Manufacturer	Purpose	In Which Waste Stream?
Hydrated lime	TBD	pH/ precipitation of solids	St. Louis Tunnel effluent

\* If the chemical formula is unknown or confidential, provide the manufacturer's name, contact person, address and phone number or a copy of the manufacturer's brochure, product label information or materials handling data sheet for each product used. Please list the major constituents or active ingredient(s), if known.

- **Used of Manufactured toxics:** The applicant must provide a list of any constituents listed in Appendices A and B which the applicant currently uses or manufactures as an intermediate or final product or by-product. If any constituents are known to be used or manufactured and are not identified in Appendices A and B, list those as well:

NA

- **Flow measurement:** What method of flow measurement will be used for each discharge point (e.g., v notch weir, pump capacity, parshall flume, etc.)? Designate whether currently installed or proposed. Identify the minimum and maximum flow measurement capability.

Influent to pond system and final outfall both have existing 9" Parshall flumes for flow measurement - the influent flume will be replaced prior to start-up of lime treatment system. The theoretical measurement range for both flumes is 0.9 cfs to 5.65 cfs.

- **Improvements:** Please provide a description of any abatement requirement, abatement project and projected final compliance dates if subject to any present requirements or compliance schedules for construction, upgrading or operation of waste treatment equipment. Also include here a description of any changes to the facility since the previous permit renewal.

See Attachment 6 for proposed construction and operation schedule for lime treatment system.

3. **Permitted Facility Information continued**

- **Ground Water Discharge:** Indicate whether this facility has any of the following:

○ Land Application (disposal/treatment) ☒ NO ☐ YES

○ Impoundment (pond/lagoon) ☐ NO ☒ YES

○ Septic System for

Industrial Waste ☒ NO ☐ YES

Domestic Waste ☒ NO ☐ YES

- **Average flows and treatment:** Please provide a narrative identification of each type of process, operation, or production area which contributes wastewater to the effluent for each outfall including process wastewater, cooling waters, domestic wastewater and stormwater runoff; the average, maximum and design flow which each process contributes; and a description of the treatment the wastewater receives including the ultimate disposal of any solid or fluid wastes other than by discharge. Processes, operations or production areas may be described in general terms. The average flow of point sources composed of stormwater may be estimated. The basis for the rainfall event and the method of estimation must be indicated.

Use additional pages as needed

OUTFALL NUMBER	WASTEWATER SOURCE	TREATMENT USED	AVG FLOW MGD*	DESIGN ** FLOW MGD*	DAILY MAX FLOW MGD*
001	See Attachment 7 and				
	Table A-6 in WQA				

\*MGD - Million gallons/day

\*\*If sediment pond, indicate approximate volume of water.

For each outfall to surface water or discharge to ground water, provide latitude/longitude and receiving water

OUTFALL	LATITUDE			LONGITUDE			RECEIVING WATERS*
	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds	
001	37	42	03	108	01	50	Dolores River

Are the receiving waters, indicated above, a ditch or storm sewer? ☒ NO ☐ YES

If YES, submit documentation that the owner of the ditch or storm sewer allows this discharge. No permit will be processed unless documentation of approval is received.



**Discharge Quality:** Analytical data for the following parameters, unless waived by the Division, shall be submitted from at least one composite sampling of each surface process water discharge point as well as state waters upstream of each discharge. Instream sampling is not required if upstream flow is intermittent or representative instream data exists. See instructions. For **GROUND WATER** analyses see Appendices D and E1-3.

PARAMETER	DETECTION LEVEL	PARAMETER	DETECTION LEVEL
Total Dissolved Solids, mg/P	10	Total Recoverable Manganese, mg/l	0.05
Flow, MGD	NA	Dissolved Manganese, mg/l	0.05
pH, s.u.	NA	Total Mercury, mg/l	0.00025
Oil and Grease, mg/l	5	Total Recoverable Nickel, mg/l	0.05
Dissolved Oxygen, mg/l	NA	Potentially Dissolved Nickel, mg/l	0.05
Alkalinity, mg/l	10	Total Recoverable Silver, mg/l	0.0002
Total Suspended Solids, mg/l	10	Potentially Dissolved Silver, mg/l	0.0002
Hardness, mg/l as CaCO <sub>3</sub>	10	Total Recoverable Uranium, mg/l	0.03
Total Ammonia, mg/l as N	0.05	Total Recoverable Zinc mg/l	0.05
Temperature, °C Winter	NA	Potentially Dissolved Zinc, mg/l	0.05
Temperature, °C Summer	NA	Total Residual Chlorine, mg/l	0.05
Biochemical Oxygen Demand, mg/l	1	Fecal Coliform, #/100 ml	NA
Chemical Oxygen Demand, mg/l	30	Nitrate, mg/l as N	0.1
Dissolved Aluminum, mg/l	0.1	Nitrite, mg/l as N	0.002
Total Arsenic, mg/l	0.05	Sulfide mg/l as H <sub>2</sub> S	0.1
Total Recoverable Cadmium, mg/l	0.0004	Boron, mg/l	0.05
Hexavalent Chromium, mg/l	0.025	Chloride, mg/l	5
Trivalent Chromium, mg/l	0.05	Sulfate, mg/l	5
Total Chromium, mg/l	0.005	Total Cyanide, mg/l	0.01
Total Recoverable Copper, mg/l	0.005	Total Recoverable Selenium, mg/l	0.002
Potentially Dissolved Copper, mg/l	0.005	Total Cobalt, mg/l	0.006
Total Recoverable Iron, mg/l	0.3	Gross Alpha, pCi/l	0.3
Dissolved Iron, mg/l	0.3	Total Radium 226 + 228, pCi/l	8
Total Recoverable Lead, mg/l	0.005	Total Fluoride, mg/l	0.1
Potentially Dissolved Lead, mg/l	0.005	Weak Acid Dissociable Cyanide, mg/l	0.01
Total Phenols, mg/l	0.100	Total Phosphorus, mg/l	0.05
Total Organic Nitrogen, mg/l	1.0		

**Dioxin Testing:** Each applicant must report qualitative data, generated using a screening procedure not calibrated with analytical standards, for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) if it:

- Uses or manufactures 2,4,5-trichlorophenoxy acetic acid (2,4,5,-T); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5,-TP); 2-(2,4,5-trichlorophenoxy) ethyl, 2,2-dichloropropionate (Erbon); O,O-dimethyl O-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel); 2,4,5-trichlorophenol (TCP); or hexachlorophene (HCP); or
- Knows or has reason to believe that TCDD is or may be present in an effluent.

**Whole Effluent Toxicity Testing and Priority Pollutant Scan for Surface Discharge Points**

If you have processes in one of the following industries you must also submit the analyses specified below by a "X" in the corresponding box. The parameters for the appropriate GC/MS fraction(s) are shown in Appendix A to this application (see 40 CFR Part 122, Appendix D Table 1 for testing requirements and additional information for these specific industries). The WET testing shall be conducted on 100% effluent and be for both *Ceriodaphnia dubia* and fathead minnows. This requirement is waived where routine testing is currently required under an existing CDPS permit. The test shall be an acute test unless the ratio of stream low flow to effluent design flow is less than 10:1, respectively, and the receiving stream has a Class 1 or Class 2 Aquatic Life use with all the appropriate aquatic life numeric standards. In the latter case a chronic test is required. The Division reserves the right to request WET testing on industries not listed below or to request additional testing as part of the application review process. If so required, the permit application will not be considered complete until the additional information is submitted.

INDUSTRY CATEGORY	WET TESTING	GC/MS FRACTION			
		VOLATILE	ACID	NEUTRAL	PETICIDE
Adhesives and sealants	X	X	X	X	
Aluminum forming	X	X	X	X	
Auto and other laundries	X	X	X	X	X
Battery manufacturing	X	X		X	
Coil coating	X	X	X	X	
Copper forming	X	X	X	X	
Electric and electronic compounds	X	X	X	X	X
Electroplating	X	X	X	X	
Explosives manufacturing	X		X	X	
Foundries	X	X	X	X	
Gum and wood (all sub parts except D and F)	X	X	X		
Subpart D--tail oil rosin	X	X	X	X	
Subpart F--rosin-based derivatives	X	X	X	X	
Inorganic chemicals manufacturing	X	X	X	X	
Iron and steel manufacturing	X	X	X	X	
Leather tanning and finishing	X	X	X	X	
Mechanical Products manufacturing	X	X	X	X	
Nonferrous metals manufacturing	X	X	X	X	X
Organic chemicals manufacturing	X	X	X	X	X
Paint and ink Formation	X	X	X	X	
Pesticides	X	X	X	X	X
Petroleum refining	X	X			
Pharmaceutical preparations	X	X	X	X	
Photographic equipment and supplies	X	X	X	X	
Plastic and synthetic materials manufacturing	X	X	X	X	X
Plastic processing	X	X			
Porcelain enameling	X				
Printing and publishing	X	X	X	X	X
Pulp and paperboard mills	X				
Rubber processing	X	X	X	X	
Soap and detergent manufacturing	X	X	X	X	
Steam electric power plants	X	X	X	X	
Textile mills (subpart C--Greige Mills are exempt from this table)	X	X	X	X	
Timber products processing	X	X	X	X	X
Landfills	X	X	X	X	X
Oil and gas extraction-- produced water	X	X	X	X	
Sugar processing	X	X	X	X	X
Oil Shale	X	X	X	X	



**Additional monitoring:**

The applicant must review Appendices A and B and must indicate whether it knows or has reason to believe that any of the pollutants listed are present in its discharge. The Division may waive the reporting requirements for individual point sources if the applicant has demonstrated that such a waiver is appropriate because information adequate to support issuance of a permit can be obtained with less stringent requirements. Each applicant must report quantitative data for each outfall containing process wastewater with the following exceptions:

- a.) For every pollutant discharged which is not so limited in an effluent limitations guideline, the applicant must either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged.
- b.) For every pollutant expected to be discharged in concentrations of 10 µg/l or greater the applicant must report quantitative data. For acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, where any of these four pollutants are expected to be discharged in concentrations of 100 µg/l or greater the applicant must report qualitative data. For every pollutant expected to be discharged in concentrations less than 10 µg/l, or in the case of acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, in concentrations less than 100 µg/l, the applicant must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged.
- c.) The applicant need not provide quantitative data if the pollutant is present in the discharge solely as the result of its presence in intake water. However, the applicant must report such pollutant as present.

**Additional WET Testing:** All applicants must identify any biological toxicity tests which have been performed within the last 3 years on any of the discharges or the receiving water in relation to a surface discharge from this facility. If this information is contained in DMRs, this step may be omitted. If there are additional tests that were not included in DMRs, then these tests must be submitted.

**Activity duration:** When did the activity commence? 2013 What is the estimated life of the activity from which the discharge(s) identified in item 13 originate? 50+ years.

**Stormwater Discharges:** Please review Appendix C. Does the facility fall under any of the industries listed?

☐ NO ☒ YES

If the answer is "yes", please complete the appropriate application for coverage under the applicable stormwater general permit. Applications are available at [coloradowaterpermits.com](http://coloradowaterpermits.com), or by contacting the Stormwater Program at 303-692-3517.

**Pollution Prevention Plans:** Please describe any pollution prevention or best management plans currently in place which could result in the improvement of water quality. These could include solvent recycling programs, material containment procedures, education, etc.

See Attachment 11

Please include any other information which you feel the Division should be aware of in drafting this permit.

**Other Environmental Permits:** Does this facility currently have any environmental permits or is it subject to regulation, under any of the following programs? Mark which of the other permits/programs the facility has obtained or is in the process of obtaining or is subject to regulation under.

Under item other mark "yes" if the facility has any of the following permits:

- a.) Prevention of Significant Deterioration (PSD) program under the Clean Air Act;
- b.) Non-attainment Program under the Clean Air Act; or
- c.) National Emission Standards for Hazardous Pollutants (NESHAPS) under the Clean Air Act.
- d.) CERCLA

Permit name	Yes	No	Date applied for	Permit no.
Colorado Division of Minerals and Geology Permit	<input type="checkbox"/>	<input type="checkbox"/>		
Underground Injection Control	<input type="checkbox"/>	<input type="checkbox"/>		
Dredge or Fill permit, Section 404 – Army Corps of Engineers	<input type="checkbox"/>	<input type="checkbox"/>		
Resource Conservation and Recovery Act (RCRA)	<input type="checkbox"/>	<input type="checkbox"/>		
CDPS Stormwater	<input type="checkbox"/>	<input type="checkbox"/>		
Colorado State Air Pollution Program	<input type="checkbox"/>	<input type="checkbox"/>		
Other Dam safety permit and solid waste permit	<input checked="" type="checkbox"/>		TBD	

### REQUIRED SIGNATURES:

**Signature of Applicant:** The applicant must be either the owner and/or operator of the site. Refer to Part B of the instructions for additional information. The application must be signed by the applicant to be considered complete. In all cases, it shall be signed as follows:

- a) In the case of corporations, by a principal executive officer of at least the level of vice-president or his or her duly authorized representative, if such representative is responsible for the overall operation of the facility from which the discharge described in the application originates.
- b) In the case of a partnership, by a general partner.
- c) In the case of a sole proprietorship, by the proprietor.
- d) In the case of a municipal, state, or other public facility, by either a principal executive officer, ranking elected official, or other duly authorized employee if such representative is responsible for the overall operation of the facility from which the discharge described in the form originates.

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment.

Signature of Owner (submission must include original signature)

Date Signed

Name (printed)

Title

Signature of Applicant (submission must include original signature)

Date Signed

Name (printed)

Title

Signature of Operator (submission must include original signature)

Date Signed

Name (printed)

Title



**Appendix A - Priority Pollutants**

Organic Toxic Pollutants in Each of Three Fractions in Analysis by Gas Chromatography/Mass Spectroscopy(GC/MS).

**Volatiles**

Acrolein  
 Acrylonitrile  
 Benzene  
 Bromoform  
 Carbon Tetrachloride  
 Chlorobenzene  
 Chlorodibromomethane  
 Chloroethane  
 2-Chloroethylvinyl Ether  
 Chloroform  
 Dichlorobromomethane  
 1,1-Dichloroethane  
 1,2-Dichloroethane  
 1,1-Dichloroethylene  
 1,2-Dichloropropane  
 1,3-Dichloropropylene  
 Ethylbenzene  
 Methyl Bromide  
 Methyl Chloride  
 Methylene Chloride  
 1,1,2,2-Tetrachloroethane  
 Tetrachloroethylene  
 Toluene  
 1,2-Trans-dichloroethylene  
 1,1,1-Trichloroethane  
 1,1,2-Trichloroethane  
 Trichloroethylene  
 Vinyl Chloride

**Base/Neutral**

Acenaphthene  
 Acenaphthylene  
 Anthracene  
 Benzidine  
 Benzo(a)anthracene  
 Benzo(a)pyrene  
 3,4-Benzofluoranthene  
 Benzo(ghi)perylene  
 Benzo(k)fluoranthene  
 Bis(2-chloroethoxy)methane  
 Bis(2-chloroethyl) ether  
 Bis(2-chloroisopropyl) ether  
 Bis(2-ethylhexyl)phthalate  
 4-Bromophenyl phenyl ether  
 Butylbenzyl phthalate  
 2-Chloronaphthalene  
 4-Chlorophenyl phenyl ether  
 Chrysene  
 Dibenzo (a,h) anthracene  
 1,2-Dichlorobenzene  
 1,3-Dichlorobenzene  
 1,4-Dichlorobenzene  
 3,3-Dichlorobenzidine  
 Diethyl phthalate  
 Dimethyl phthalate  
 Di-n-butyl phthalate  
 2,4-Dinitrotoluene  
 2,6-Dinitrotoluene  
 Di-n-octyl phthalate  
 1,2-Diphenylhydrazine (as azobenzene)  
 Fluorene  
 Fluoranthene  
 Hexachlorobenzene  
 Hexachlorobutadiene  
 Hexachlorocyclopentadiene  
 Hexachloroethane  
 Indeno(1,2,3-cd) pyrene  
 Isophorone  
 Naphthalene  
 Nitrobenzene  
 N-Nitrosodimethylamine  
 N-Nitrosodi-n-propylamine  
 N-Nitrosodiphenylamine  
 Phenanthrene  
 Pyrene  
 1,2,4-Trichlorobenzene)

**Acid**

2-Chlorophenol  
 2,4-Dichlorophenol  
 2,4-Dimethylphenol  
 4,6-Dinitro-o-cresol  
 2,4-Dinitrophenol  
 2-Nitrophenol  
 4-Nitrophenol  
 P-chloro-m-cresol  
 Pentachlorophenol  
 Phenol  
 2,4,6-Trichlorophenol

**Pesticides**

Aldrin	Endosulfan Sulfate
Alpha-BHC	Endrin
Beta-BHC	Endrin Aldehyde
Gamma-BHC	Heptachlor
Delta-BHC	Heptachlor Epoxide
Chlordane	PCB-1242
4,4'-DDT	PCB-1254
4,4'-DDE	PCB-1221
4,4'-DDD	PCB-1232
Dieldrin	PCB-1248
Alpha-Endosulfan	PCB-1260
Beta-Endosulfan	PCB-1016
	Toxaphene

**Metals, Cyanide, and Total Phenols**

Total Recoverable Antimony  
 Total Recoverable Beryllium  
 Total Recoverable Thallium  
 Bromide  
 Color  
 Sulfite  
 Surfactants  
 Total Magnesium  
 Total Molybdenum  
 Total Tin  
 Total Titanium

**Appendix B - Toxic Pollutants and Hazardous Substances****Toxic Pollutants**

Asbestos

**Hazardous Substances**

Acetaldehyde  
Allyl alcohol  
Allyl chloride  
Amyl acetate  
Aniline  
Benzonitrile  
Benzyl chloride  
Butyl acetate  
Butylamine  
Captan  
Carbaryl  
Carbofuran  
Carbon disulfide  
Chlorpyrifos  
Coumaphos  
Cresol  
Crotonaldehyde  
Cyclohexane  
2,4-D (2,4-Dichlorophenoxy  
acetic acid)  
Diazinon  
Dicamba  
Dichlobenil  
Dichlone  
2,2-Dichloropropionic acid  
Dichlorvos  
Diethyl amine  
Dimethyl amine  
Dinitrobenzene  
Diquat  
Disulfoton  
Diuron  
Epichlorohydrin  
Ethion  
Ethylene diamine  
Ethylene dibromide  
Formaldehyde  
Furfural  
Guthion  
Isoprene  
Isopropanolamine  
dodecylbenzenesulfonate

Kelthane  
Kepone  
Malathion  
Mercaptodimethur  
Methoxychlor  
Methyl mercaptan  
Methyl methacrylate  
Methyl parathion  
Mevinphos  
Mexacarbate  
Monoethyl amine  
Monomethyl amine  
Naled  
Naphthenic acid  
Nitrotoluene  
Parathion  
Phenolsulfanate  
Phosgene  
Propargite  
Propylene oxide  
Pyrethrins  
Quinoline  
Resorcinol  
Strontium  
Strychnine  
Styrene  
2,4,5-T (2,4,5-Trichlorophenoxy acetic acid)  
  
TDE (Tetrachlorodiphenyl ethane)  
2,4,5-TP [2-(2,4,5-Trichlorophenoxy) propanoic acid]  
  
Trichlorofan  
Triethanolamine dodecylbenzenesulfonate  
Triethylamine  
Trimethylamine  
Uranium  
Vanadium  
Vinyl acetate  
Xylene  
Xylenol  
Zirconium



**APPENDIX C - INDUSTRIES REQUIRED TO OBTAIN STORMWATER DISCHARGE PERMITS**

The **Standard Industrial Classification (SIC) Code** or codes for the facility usually determines permit coverage. SIC Codes are assigned according to the primary activities performed by a company. They are often assigned for insurance purposes or when a business registers as a corporation. Industries can also determine their SIC Code by checking with their trade association, Chamber of Commerce, legal counsel, or library for the SIC Manual, or online at [www.osha.gov/pls/imis/sic\\_manual.html](http://www.osha.gov/pls/imis/sic_manual.html).

The industries are listed here by their SIC Code. The manufacturing industries are generally represented by SIC Codes 20-39. (A two digit code, such as 42, means that **all** industries under that heading, from 4200 to 4299, are covered.) Use this table to determine which of the Division's general permits is appropriate for your facility.

SIC Code	Industry Type	Notes	Permit Type
10	Metal mining and milling, metal mining services	(a)	M
12	Coal mining, coal mining services	(a)	C, M
13	Oil and gas extraction, oil and gas services	(b)	A
14	Mining and quarrying of nonmetallic minerals except fuels (e.g., sand and gravel)	(a)	S
NA	Construction	(f)	N
20	Food and kindred products (except)	(g)	A
2011	Meat packing plants	(g)	B
2015	Poultry slaughtering and processing	(g)	B
2077	Animal and marine fats and oils	(g)	B
21	Tobacco products	(g)	A
22	Textile mills	(f) (g)	A
23	Apparel and other finished products made from fabric and similar material	(g)	A
24	Lumber and wood products except furniture (except)	(g)	A
2491	Wood preserving	(f) (g)	B
25	Furniture and fixtures	(g)	A
26	Paper and allied products	(g)	A
27	Printing, publishing, and allied products	(g)	A
28	Chemicals and allied products (except)	(f) (g)	B
283	Drugs	(f)(g)	B
285	Paints and allied products	(g)	B
29	Petroleum refining and related industries (except)	(f)	B
2951	Asphalt batch plants	(c)	A,N,S
30	Rubber and miscellaneous plastics products	(f) (g)	B
31	Leather Products (except)	(g)	A
311	Leather tanning and finishing	(f)	A
32	Stone, clay, glass and concrete products (except)	(g)	A
3241	Cement manufacturing	(f)	B
3273	Ready-mix concrete facilities	(c)	A,N,S
33	Primary metals industries	(f) (g)	B
34	Fabrication of metal products, except machinery and transportation equipment (except)	(g)	A
3441	Fabricated structural metal	(g)	A
35	Industrial and commercial machinery and computer equipment	(g)	A
36	Electronic and other electrical equipment and components, except computer equipment	(g)	A
37	Transportation equipment	(g)	A

## APPENDIX C

SIC Code	Industry Type	Permit Notes	Type
38	Measuring, analyzing, and controlling instruments: photographic, medical, and optical goods, watches and clocks	(g)	A
39	Miscellaneous manufacturing industries	(g)	A
40	Railroad transportation	(d) (g)	A
41	Local and suburban transit and interurban highway passenger transportation	(d) (g)	A
42	Motor freight transportation and warehousing (except)	(d) (g)	A
4221	Farm Product warehousing and storage	(g)	A
4222	Refrigerated warehousing and storage	(g)	A
4225	General warehousing and storage	(g)	A
44	Water Transportation	(d) (g)	A
45	Transportation by Air	(d) (e) (g)	A,B
4911	Steam electric power generation (all fuel types)	(f) (g)	B
4952	Wastewater treatment plants with a design flow of 1.0 MGD or more, or required to have an approved pretreatment program under 40 CFR 403	(f) (g)	A
4953	Hazardous waste treatment, storage or disposal facilities; incinerators (including boilers and industrial furnaces) that burn hazardous waste; and active or inactive landfills, land application sites, or open dumps w/industrial waste and w/o stabilized final cover	(f) (g)	B
5015	Motor vehicle parts, used		R
5093	Scrap and waste materials		R
5171	Petroleum bulk stations and terminals	(d) (g)	A

Notes:

- (a) For this SIC Code, a stormwater permit is required only if runoff contacts overburden, raw material, intermediate or finished product, or waste products.
- (b) For this SIC Code (oil and gas facilities), a stormwater permit is essentially required only the facility has had a discharge of a reportable quantity. See Colorado Discharge Permit System Regulations, Section 61.4(3)(b)(i)(C).
- (c) Facilities at sand and gravel operations may be covered under permit S; facilities at construction sites may be covered under permit N; other facilities, including mobile plants, may be covered under permit A.
- (d) For this SIC Code, only facilities with vehicle maintenance (including fueling), equipment cleaning, or airport deicing need a stormwater permit.
- (e) Airports that use 1000 gallons of deicer(s) or more annually (undiluted), and that have annual fuel sales of one million gal/year or more, are covered under permit B. Airports that do not meet these criteria need permit A.
- (f) For most facilities covered by the stormwater regulations, SIC codes are used to indicate the **primary** function of the facility. This footnote denotes industries which, in most cases, are covered under the stormwater regulations regardless of what other activities are conducted at the site (contact Division for details).
- (g) For this SIC Code, if **all** industrial activity, materials handling and storage at the facility are protected from precipitation, the facility may qualify for coverage under the No Exposure Exclusion. If that case, stormwater permit coverage would not be required. See

<http://www.cdphe.state.co.us/wq/PermitsUnit/stormwater/NoExposure.PDF>

Permit types:

- A: **Light Industry** General Permit (Permit No. COR-010000)
- B: **Heavy Industry** General Permit (Permit No. COR-020000)
- N: **Construction** General Permit (Permit No. COR-030000) (see Instructions, Item C.4)
- M: **Metal Mining** General Permit (Permit No. COR-040000)
- C: **Coal Mining** General Permit (Permit No. COG-850000)
- S: **Sand and Gravel** General Permit (Permit No. COG-500000)
- R: **Recycling Industry** General Permit (Permit No. COR-600000)



**Appendix D -- GENERAL REQUIREMENTS FOR DISCHARGES TO GROUND WATER FROM****IMPOUNDMENTS, LAND APPLICATION AND SEPTIC SYSTEMS >2000 GPD**

- (1) **FACILITY MAPPING:** See Site map information in this application.
- (2) **FACILITY SKETCH:** See Sketch information in this application.
- (3) **SITE STUDIES/INFORMATION:** Provide a copy of any studies, geological reports, consultant reports, water quality analyses pertinent to your facility/site which you feel may help the Division in the development your ground-water permit. Include such reports/studies that address such areas of interest as ground-water quality analyses that establish ambient (existing ground-water quality prior to your ownership of the property), all Material Safety Data Sheets (MSDS) for each chemical used at your facility (an example MSDS is available from the Ground Water Unit), well driller's logs and pumping information of the local aquifer, any computer modelling results that have been performed for the immediate area, U. S. Geological Survey (USGS) reports for the area, etc.
- (4) **GEOLOGY/HYDROGEOLOGY OF SITE:** (a) Describe the local geology of the site. Identify and describe all lithologic units from the ground surface to the first impermeable stratigraphic unit. Provide the estimated thickness of each unit. Include a geologic map or cross sections, if necessary. Maps will be on 8.5 X 11 paper.
- (b) Describe the hydrogeology of the site. Describe in detail the relationship of this site to any alluvial or bedrock water bearing formations (unconfined, confined, or perched) and surface water (lakes, ponds, ditches or streams). Identify aquifer name or formation name for each water bearing formation and provide the depth to water (include water elevation) for each. Describe any unusual geologic or hydrologic features that could affect ground water rate of movement or direction of movement (i.e. faults, fractures).
- (c) Describe aquifer characteristics (transmissivity or permeability, porosity and storage capacity) of these water bearing formations. State the source(s) of this information.
- (d) Provide potentiometric surface (ground water level) map(s) of the water bearing formations. Document information source(s), if obtained from published data. If water levels are contoured from site data, control points must be annotated with water table elevation and time period of measurements indicated in legend. Map must be legible and no larger than 11 X 17 inches paper.
- (e) Discuss any hydrogeologic investigations or ground-water modeling conducted at this site.
- (5) **Water Quality Sampling Requirements** The Discharge Regulations have specific requirements [61.4. (7)] for effluent characterization. These requirements are listed below. In addition, the Division is requiring a ground water quality characterization, which is found in paragraph (a), below.
- (a) Each applicant must submit (i) a description of the ground water in the sample prior to filtration [i.e. clear, murky, cloudy, etc.] (ii) the below listed analytical data used to document (A) ambient ground water near the impoundment, land application and/or leach field, and (B) the upgradient ground-water quality; (iii) indicate the sample location (well # and depth) and, how sample was obtained; (iv) have the analytical laboratory indicate the method used and the detection limits of the method:

Total Coliforms  
Biochemical Oxygen Demand (BOD)  
Chemical Oxygen Demand (COD)  
Total Organic Carbon (TOC)  
Total Suspended Solids (TSS)  
Total Ammonia as N  
Temperature  
pH  
Nitrate as N

(CONTINUED ON NEXT PAGE)

CHARACTERIZATION OF GROUND WATER  
(Measured as dissolved concentration)

Sodium (Na)	Chloride (Cl)
Calcium (Ca)	Bicarbonate ( $\text{HCO}_3$ )
Magnesium (Mg)	Sulfate ( $\text{SO}_4$ )
Potassium (K)	Carbonate ( $\text{CO}_3$ )
Iron (Fe)	Total Dissolved Solids

(b) Each applicant must sample, analyze and report to the Division any of the below listed pollutants he/she knows or has reason to believe may be present in the ground water below his/her property:

(i) TABLE III OF APPENDIX D, PART 122, TITLE 40 OF THE CODE OF FEDERAL REGULATIONS; OTHER TOXIC POLLUTANTS (METALS AND CYANIDE) AND TOTAL PHENOLS (UNLESS INDICATED OTHERWISE, ANALYZE THE FOLLOWING FOR THE DISSOLVED CONCENTRATION):

ANTIMONY	ARSENIC
BERYLLIUM	CADMIUM
CHROMIUM**	COPPER
LEAD	MERCURY
NICKEL	SELENIUM
SILVER	THALLIUM
ZINC	CYANIDE, WEAK ACID DISSOCIABLE
TOTAL PHENOLS	

\*\* = If the dissolved concentration for chromium exceeds 0.1 mg/l, then an additional analysis for hexavalent chromium shall be performed

(ii) TABLE II OF APPENDIX D, PART 122, TITLE 40 OF THE CODE OF FEDERAL REGULATIONS; ORGANIC TOXIC POLLUTANTS IN EACH OF THE FOUR FRACTIONS IN ANALYSIS BY GAS CHROMATOGRAPHY/MASS SPECTROSCOPY (GC/MS)—CONSIDER ALL POLLUTANTS LISTED FOR EACH FRACTION INDICATED FOR YOUR INDUSTRY, AS INDICATED IN THE CHART ON PAGE 4 OF THIS APPLICATION:

The list of organic toxic pollutants in each of four fractions - "Volatiles, Base/Neutral, Acid and Pesticides" - is found in "Appendix A - Priority Pollutants". Measure the dissolved concentration for each of the parameters listed that you know or believe will be present at your facility.

(iii) TABLE V OF APPENDIX D, PART 122, TITLE 40 OF THE CODE OF FEDERAL REGULATIONS; TOXIC POLLUTANTS AND HAZARDOUS SUBSTANCES.

The list of toxic pollutants and hazardous substances is found in "Appendix B", above. Measure the dissolved concentration for each of the parameters listed that you know or believe will be present at your facility.

(c) Each applicant is required to report that 2,3,7,8 Tetrachlorobenzo-P-Dioxin (TCDD) may be in the ground water based upon whether he/she uses or manufactures one of the below listed compounds or whether he/she knows or has reason to believe that TCDD will or may be present in the soil or ground water.

- (i) 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) (CAS #93-76-5);
- (ii) 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) (CAS #93-72-1);
- (iii) 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) (CAS #136-25-4);
- (iv) 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnell) (CAS #299-84-3);
- (v) 2,4,5-trichlorophenol (TCP) (CAS #95-95-4); or
- (vi) Hexachlorophene (HCP) (CAS #70-30-4).



**APPENDIX E-1- IMPOUNDMENTS****SPECIFIC REQUIREMENTS FOR IMPOUNDMENTS**

COMPLETE THIS PORTION OF THE APPLICATION FOR EACH IMPOUNDMENT AT YOUR FACILITY

1) CHECK ANY OF THE FOLLOWING THAT PERTAIN TO THIS FACILITY:

- ☐ \_\_\_\_\_ (a) The impoundment(s) at this facility is(are) subject to regulation under the Uranium Mill Tailings Radiation Control Act.
- ☐ \_\_\_\_\_ (b) The impoundment(s) at this facility is(are) used in the treatment, storage or recharge of raw or potable water.
- ☐ \_\_\_\_\_ (c) The impoundment(s) at this facility is(are) used only for storm water retention or detention. Provide a copy of the Stormwater permit with this application, if applicable.
- ☐ \_\_\_\_\_ (d) The impoundment currently has a valid certificate of designation [C.D.] (pursuant to the Solid Waste Disposal and Facilities Act, CRS 1973 30-20-101 et seq. as amended). Provide a copy of the C.D. with this application.
- ☐ \_\_\_\_\_ (e) This facility has an Underground Injection Control Permit or Authorization by Rule (Safe Drinking Water Act, 42 USC 300f, et seq.). Provide a copy of the permit or authorization by rule.
- ☐ \_\_\_\_\_ (f) This facility has an impoundment which is subject to the jurisdiction of one of the following State agencies:
- \_\_\_\_\_ (i) Minerals and Geology Division (formerly Mined Land Reclamation)
- \_\_\_\_\_ (ii) State Engineer's Office
- \_\_\_\_\_ (iii) Oil and Gas Conservation Commission
- \_\_\_\_\_ (iv) Hazardous Materials and Waste Management Division

If you checked any of the above State agencies, please provide, on a separate sheet of paper, the contact person's name and telephone number and all pertinent identification for your facility, as provided to you by the State agency.

- ☐ \_\_\_\_\_ (g) This facility is subject to regulation under the "Confined Animal Feeding Operation Control Regulation", 4.8.0.

IF THE ONLY IMPOUNDMENT(S) AT THIS SITE IS (ARE) ONE (OR MORE) OF THE ABOVE AND LAND APPLICATION AND/OR SEPTIC SYSTEM ARE/IS NOT APPLICABLE, REFER TO "31" IN THIS APPLICATION.

- 2) Provide detailed plan and side view sketches of impoundment, include liner thickness (if lined) and depth to ground water.
- 3) Provide technical information on liner type, materials used in construction, thickness and installation.
- 4) Provide results of "in situ" permeability testing of the clay liner or the expected permeability of a synthetic liner for the bottom and sides of the impoundment.

**APPENDIX E-2 - LAND APPLICATION****SPECIFIC REQUIREMENTS FOR LAND APPLICATION**

*COMPLETE THIS PORTION OF THE APPLICATION ON SEPARATE SHEETS OF PAPER AND ATTACH THEM TO THE APPLICATION AS APPENDIX E-2*

- (1) Analytical data used to document ambient ground-water quality should be submitted for the following parameters (Unless otherwise indicated, determine the dissolved concentration of each of the following):

Aluminum	Beryllium	Arsenic	Silver
Boron	Cobalt	Barium	Cadmium
Copper	Lithium	Chromium	Cyanide (Weak Acid Dissociable)
Nickel	Vanadium	Fluoride	Lead
		Mercury	Zinc
		Nitrite	Selenium
		Manganese	Color
		Copper	Corrosivity
		Foaming Agents	Odor
		Gross Alpha (excl. Radon/Uranium)	
		Beta and Photon Emitters	

- (2) Provide a description of the A and B soil horizons mapped at this site by the U. S. Soil Conservation Service.
- (3) Describe the existing vegetative cover at the site. Include plans for any proposed disturbance or planting.
- (4) Does this land application plan use the root zone for attenuation of effluent components? If so, explain in detail. Include a report of the vadose zone modelling, if performed.
- (5) Provide all information pertaining to precipitation, evapotranspiration, and infiltration for this site (supplemental irrigation, solar and wind evaporation, plant uptake, infiltration tests).
- (6) Describe the proposed rate and schedule of application and its expected effects on ground water levels.
- (7) The following parameters should be determined from soil samples taken at one foot intervals to a depth of five feet. It is preferred that these soil samples be collected in the spring. These results are to be provided to the Division, when they are available (Parameters are to be measured as Total concentrations (using the AB-DPTA extraction--Contact Jim Self at the CSU Soil Laboratory), as appropriate).

aluminum	copper	nitrate residuals	zinc
iron	nickel	ammonia residuals	
arsenic	lead	phosphorous	
cadmium	mercury	potassium	
chromium	molybdenum	selenium	

- (8) Describe the effluent storage capacity during inclement weather and/or frozen ground.



**APPENDIX E-3 - SEPTIC SYSTEMS GREATER THAN 2000 GALLONS PER DAY (GPD)****SPECIFIC REQUIREMENTS FOR SEPTIC SYSTEM >2000 GPD****FACILITY WASTESTREAM**DOMESTIC WASTE ☐ Yes ☐ NoINDUSTRIAL WASTE ☐ Yes ☐ No

Indicate "Facility Type" and indicate, below, the Design Capacity of the septic system plus whether the facility also has Impoundment(s) or Land Application associated with it.

**Suggested "Facility Type"**

Industrial/Domestic Wastewater: (a) Business; (b) Ski Area; (c) Campground/R.V. Park;  
(d) Motel/Hotel/Dude Ranch; (e) Community System; (f) School; (g) Church; (h) Hardrock Mining/Milling / Placer Mining / Coal Mining; (i) Sand and Gravel Production; (j) Construction Dewatering; (k) Ground Water Cleanup of Gasoline/Diesel

FACILITY TYPE \_\_\_\_\_

SEPTIC SYSTEM DESIGN CAPACITY = \_\_\_\_\_ gpd

Circle the appropriate components of the septic system:

**TWO STAGE SYSTEM:****FIRST STAGE**

- (a) SEPTIC TANK  
(b) AERATION SYSTEM

**SECOND STAGE**

- (a) BED (1) PIPE & GRAVEL  
(2) GRAVELLESS CHAMBERS  
(b) TRENCH (3) GRAVELLESS PIPE

**THREE STAGE SYSTEM:****FIRST STAGE**

- (a) SEPTIC TANK  
(b) AERATION SYSTEM

**SECOND STAGE**

SAND FILTER

**THIRD STAGE**

- (a) BED (1) PIPE & GRAVEL  
(2) GRAVELLESS CHAMBERS  
(b) TRENCH (3) GRAVELLESS PIPE

IMPOUNDMENT No Yes # of Impoundments \_\_\_\_\_  
LENGTH and WIDTH of each pond at water surface  $L_1$  \_\_\_\_\_ ft  $W_1$  \_\_\_\_\_ ft  
DEPTH of each pond  $D_1$  \_\_\_\_\_ ft; HORIZONTAL SLOPE of sides of pond \_\_\_\_:\_\_\_\_  
(Attach extra sheets of paper as required.)

LAND APPLICATION No Yes Type \_\_\_\_\_

If the response is "Yes" to either the impoundment or land application question, please refer to E-1 OR E-2, RESPECTIVELY.

**APPENDIX F****ENVIRONMENTAL PERMIT INFORMATION****TYPES OF PERMITS AVAILABLE FOR FACILITIES:**

1. USEPA UNDERGROUND INJECTION CONTROL PERMIT;
2. COLORADO DEPARTMENT OF HEALTH STORMWATER PERMIT;
3. COLORADO DEPARTMENT OF HEALTH AIR POLLUTION EMISSION PERMIT;
4. COLORADO DIVISION OF MINERALS AND GEOLOGY PERMIT;  
(Please include the mined land reclamation board permit anniversary date.)
5. RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)
  - I. RCRA SUBTITLE C HAZARDOUS WASTE:
    - i) PROVIDE YOUR RCRA EPA ID NUMBER;
    - ii) PROVIDE YOUR STATE RCRA PERMIT NUMBER;
    - iii) DO YOU NOW HAVE OR HAVE YOU IN THE PAST HAD INTERIM STATUS?
  - II. RCRA SUBTITLE D SOLID WASTE:
    - i) HAS A CERTIFICATE OF DESIGNATION (CD) FOR SOLID WASTE DISPOSAL BEEN ISSUED FOR THIS SITE?
    - ii) ARE YOU DISPOSING OF YOUR OWN WASTE ON YOUR OWN PROPERTY?
    - iii) DO YOU HAVE AN APPLICATION FOR A CD PENDING?
    - iv) IF THIS FACILITY IS A MINING OPERATION, ARE YOU DISPOSING OF MINE WASTE ON YOUR OWN PROPERTY?
    - v) HAVE YOU DONE ANY RECYCLING AT THIS SITE?
    - vi) IS THERE BENEFICIAL USE OR DISPOSAL OF BIOSOLIDS OR SEPTAGE AT THIS PROPERTY?
    - vii) IS YOUR PROPERTY USED AS A TRANSFER STATION?
  - III. RCRA SUBTITLE I UNDERGROUND STORAGE TANKS
    - i) ARE THERE EITHER ABOVE GROUND OR BELOW GROUND TANKS ON THIS PROPERTY?
    - ii) HAS THERE BEEN A RELEASE FROM THE TANK SYSTEM?--IF YES, THEN RESPOND TO "iii)".
    - iii) HAS ASSESSMENT WORK BEEN PERFORMED?--IF YES, THEN RESPOND TO "iv)".
    - iv) HAS A CORRECTIVE ACTION PLAN BEEN APPROVED OR PERFORMED?
6. URANIUM MILLS TAILINGS REMEDIAL ACTION PROGRAM (UMTRAP):
  - IS THERE A REMEDIAL ACTION PLAN PENDING OR IN PLACE AT THIS PROPERTY?
    - i) IS THERE A SURFACE DISCHARGE PERMIT?
    - ii) IS THERE AN AIR EMISSIONS PERMIT?
7. COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA):
  - IS THIS PROPERTY LISTED AS A SUPER FUND SITE?



**APPENDIX G  
LOCAL RESOURCES OF INFORMATION**

U.S. Geological Survey Library  
Building 20  
Denver Federal Center \*

Telephone: 303/236-1000

U.S. Geological Survey Map Sales  
Building 810  
Denver Federal Center \*

Telephone: 303/236-7476

\* Located in Lakewood between Sixth Avenue and Alameda Boulevard,  
Kipling Street and Union Boulevard

Office of the Colorado State Engineer  
1313 Sherman Street  
Room 818  
Denver, Colorado

Telephone: 303/866-3581

Soil Survey Maps are located at:  
Soil Conservation Service  
655 Parfet Street  
Room E 200 C  
Lakewood, Colorado 80215-5517

Telephone: 303/236-2897

US EPA Region VIII  
Mr. Chet Pauls  
Underground Injection Control Program  
999 18th St.  
Suite 500  
Denver, Colorado 80202-2466

Telephone: 303/293-1430

Air Pollution Control Division  
Hazardous Materials and Waste Management Division  
Radiation Control Division  
Colorado Department of Health and Environment  
4300 Cherry Creek Drive South  
Denver, Colorado 80222-1530

Telephone: 303/692-3100

Telephone: 303/692-3300

Telephone: 303/692-3030

Laboratory Division at the  
Colorado Department of Health and Environment  
4210 East 11th Avenue  
Denver, Colorado 80220

Telephone: 303/691-4700

**APPLICATION GENERAL INFORMATION AND INSTRUCTIONS**

This application is for use by all industrial **process water dischargers to surface water, ground water or stormwater dischargers**. Discharges to ground water may occur from impoundments that are either non-discharging to surface water or discharging to surface water, land application and septic systems, whose design capacity is greater than 2000 gallons per day. The Division has industry specific permits for construction dewatering, gasoline clean up sites, water treatment plants, hardrock mining, coal mining, non-metallic metals mining and placer mining along with several for stormwater only discharges. If the facility falls under one of these activities, please contact the Division for the appropriate application. This form may be reproduced. For information on electronic copies, please contact the Permits and Enforcement Section at 692-3590.

**WATER RIGHTS**

The State Engineers Office (SEO) has indicated that any discharge that does not return water directly to surface waters (i.e. land application, rapid infiltration basins, etc.) has the potential for material injury to a water right. As a result, the SEO needs to determine that material injury to a water right will not occur from such activities. To make this judgement, the SEO requests that a copy of all documentation demonstrating that the requirements of Colorado water law have been met, be submitted to their office for review. The submittal should be made as soon as possible to the following address:

Colorado Division of Water Resources  
1313 Sherman St. Rm 818  
Denver, Colorado 80203

Should there be any questions on the issue of water rights, the SEO can be contacted at (303) 866-3581. It is important to understand that any CDPS permit issued by the Division **does not constitute a water right. Issuance of a CDPS permit does not negate the need to also have the necessary water rights in place.** It is also important to understand that even if the activity has an existing CDPS permit, this is no guarantee that the proper water rights are in place.



**Atlantic Richfield Company, Rico Mine**  
**Colorado Discharge Permit System Application**

**Attachments**

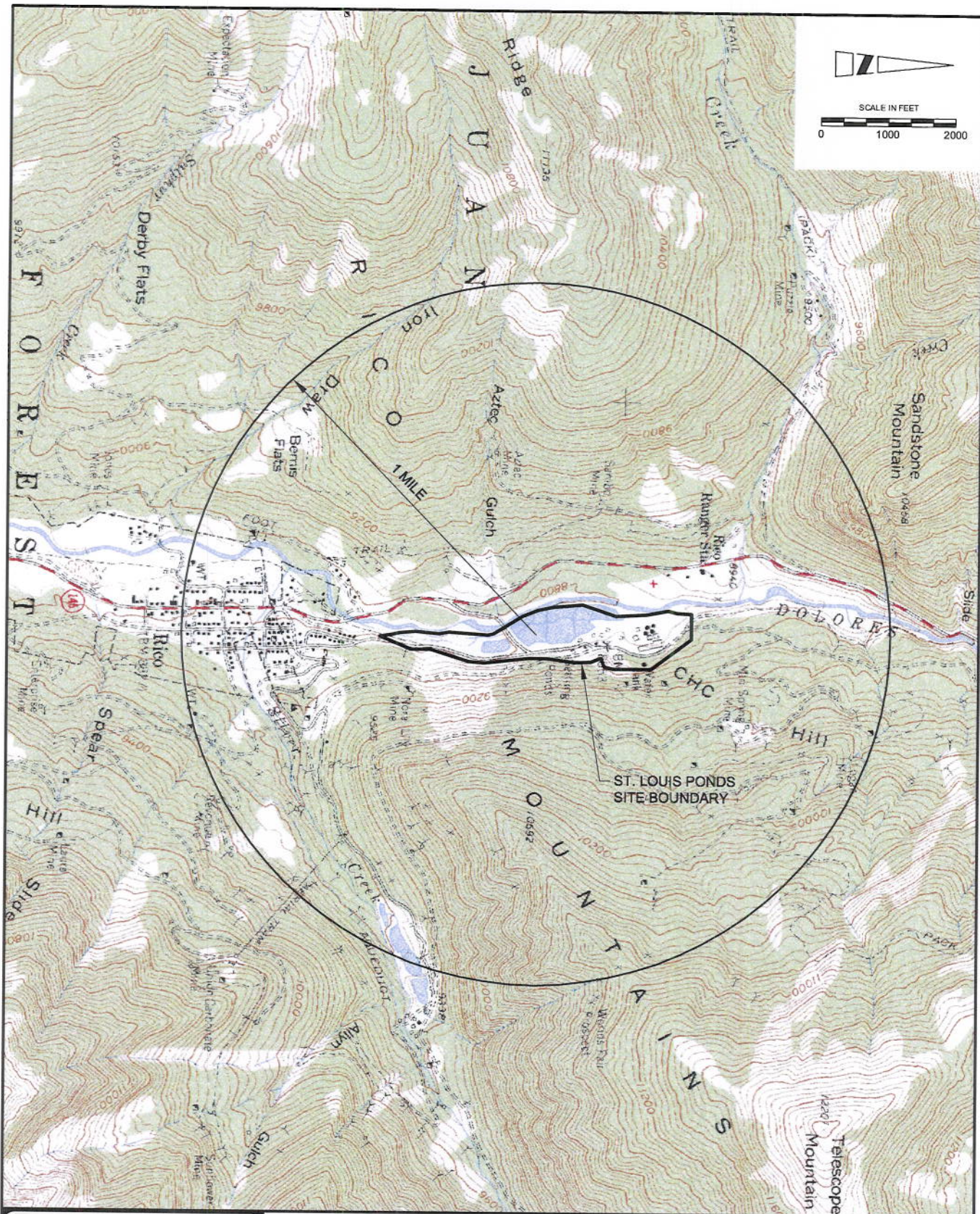
**Required by Application Form:**

- Attachment 1 Regional Map
- Attachment 2 Location Map
- Attachment 3 Site maps
- Attachment 4 Water Balance
- Attachment 5 MSDS for hydrated lime
- Attachment 6 Description of lime treatment system and proposed schedule for construction and operation
- Attachment 7 Average flows and treatment
- Attachment 8 Discharge quality of effluent
- Attachment 9 Dioxin testing
- Attachment 10 WET testing and Priority Pollutant Scan
- Attachment 11 Pollution Prevention Plans
- Attachment 12 Pond (impoundment) descriptions
- Attachment 13 Geology/hydrology summary

**Additional Attachments:**

- Attachment 14 Summary of site history and operation
- Attachment 15 2008 Water Quality Assessment
- Attachment 16 Mixing Zone Analysis
- Attachment 17 Current and anticipated land access/ownership status





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**ST. LOUIS PONDS  
CDPS PERMIT APPLICATION**

**LOCATION MAP**

AECOM  
PROJECT NO.

60157757

FIGURE

**2-1**